

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	383	amyloid beta protein	USPAT	ADJ	ON	2004/05/06 12:33
S2	22	S1 with aggreg\$	USPAT	ADJ	ON	2004/05/06 12:33

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\*\*\*\*\* STN Columbus \*\*\*\*\*  
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=> file biosis caplus  
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FULL ESTIMATED COST  
SINCE FILE ENTRY TOTAL  
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FILE 'BIOSIS' ENTERED AT 13:02:04 ON 06 MAY 2004  
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=> s amyloid (3a) beta (3a) (protein or peptide)  
L1 15418 AMYLOID (3A) BETA (3A) (PROTEIN OR PEPTIDE)  
L2 884 L1 (10A) AGGREGAT?  
=> s l1 (10a) prevent?  
L3 22 L2 (10A) PREVENT?  
=> s l1 (10a) inhibit?  
L4 1009 L1 (10A) INHIBIT?  
=> s l2 (10a) inhibit?  
L5 83 L2 (10A) INHIBIT?  
=> s l3 or l5  
L6 102 L3 OR L5

=> dup rem l6  
PROCESSING COMPLETED FOR L6  
L7 80 DUP REM L6 (22 DUPLICATES REMOVED)  
=> s l2 (10a) suppress?  
L8 0 L2 (10A) SUPPRESS?  
=> d l7 trial 1-5

'TRIAL' IS NOT A VALID FORMAT  
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in at least one of the files. Refer to file specific help messages  
or the STNGUIDE file for information on formats available in  
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L7 ANSWER 1 OF 80 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. ON STN  
DUPLICATE 1  
AN 2004:149016 BIOSIS

DN PREV200400152231  
TI Two types of Alzheimer's \*\*\*beta\*\*\* - \*\*\*amyloid\*\*\* (1-40)  
\*\*\*peptide\*\*\* membrane interactions: \*\*\*Aggregation\*\*\*  
\*\*\*preventing\*\*\* transmembrane anchoring versus accelerated surface  
fibril formation.  
AU Bokvist, Marcus; Lindstrom, Fredrick; Watts, Anthony; Grobner, Gerhard  
[Reprint Author]  
CS Department of Biophysical Chemistry, Umea University, 90187, Umea, Sweden  
SO Journal of Molecular Biology, (23 January 2004) Vol. 335, No. 4, pp.  
1039-1049. Print.  
ISSN: 0022-2836 (ISSN print).  
DT Article  
LA English  
ED Entered STN: 17 Mar 2004  
Last Updated on STN: 17 Mar 2004

L7 ANSWER 2 OF 80 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:855953 CAPLUS  
DN 139:363578  
TI Synthetic immunogens of .beta.-amyloid peptide for treatment of  
Alzheimer's disease  
IN St. George-Hyslop, Peter; McLaurin, Joanne  
PA The Governing Council of the University of Toronto, Can.  
SO PCT Int. Appl., 92 pp.  
CODEN: PIXXD2

DT Patent  
LA English  
FAM.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003089460	A1	20031030	WO 2003-CA502	20030407
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

US 2003232758 A1 20031218 US 2003-411544 20030410  
PPAI US 2002-373914P P 20020419  
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 80 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:511089 CAPLUS  
DN 139:79164  
TI Apomorphine inhibitors of amyloid-beta. (A.beta.) fibril formation and  
their use in amyloidosis based disease  
IN Tashuel, Hilal A.; Callaway, David J. E.  
PA The Picower Institute for Medical Research, USA  
SO PCT Int. Appl., 57 pp.  
CODEN: PIXXD2  
DT Patent

LA English  
FAN.CNT 1

PI WO 2003053356 A2 20030703 APPLICATION NO. DATE  
WO 2003053356 A3 20030912 WO 2002-US40660 20021220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, NZ, OM, PH,  
PL, PT, RO, RU, SC, SE, SG, SK, SL, TJ, TW, TN, TR, TT, TZ,  
UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, BG, BZ, CA, CH, CN,  
CJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GW, GQ, GW, ML,  
MR, NE, SN, TD, TG

PRAI US 2001-341255 P 20011220  
OS MARPAT 139:79164

L7 ANSWER 4 OF 80 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:777396 CAPLUS  
DN 139:271076

TI Apomorphine derivatives and analogs as inhibitors of amyloid-beta.  
(A.beta.) fibril formation and their use in amyloidosis based disease  
Lashuel, Hilal A.; Callaway, David J. E.

PA USA  
SO U.S. Pat. Appl. Publ., 25 pp.  
CODEN: USXXCO

DT Patent  
LA English  
FAN.CNT 1

PI US 2003187011 A1 20031002 APPLICATION NO. DATE  
PRAI US 2001-341255 P 20011220 US 2002-320609 20021217  
OS MARPAT 139:271076

L7 ANSWER 5 OF 80 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:473269 CAPLUS  
DN 139:47180

TI Treatments for conditions caused by neurotoxic .beta.-amyloid peptide aggregates using compounds that decrease membrane depolarization or calcium influx caused by aggregated .beta.-amyloid  
Ingram, Vernon M.; Blanchard, Barbara J.; Stockwell, Brent R.

PA USA  
SO U.S. Pat. Appl. Publ., 33 pp., Cont.-in-part of U.S. Ser. No. 706,574.  
CODEN: USXXCO

DT Patent  
LA English  
FAN.CNT 2

PI US 2003114510 A1 20030619 APPLICATION NO. DATE  
WO 2002035987 A2 20020510 US 2002-51663 20020118  
WO 2002035987 A3 20020801 WO 2001-US46957 20011105

W: CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, TR  
EP 1341548 A2 20030910 EP 2001-990891 20011105  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IL, LU, NL, SE, MC, PT,  
IE, FI, CY, TR  
US 2003105152 A1 20030605 US 2002-143534 20020510  
WO 2003068147 A2 20030821 WO 2003-US1672 20030121  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, NZ, OM, PH,  
PL, PT, RO, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, TM  
UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, BG, BZ, CA, CH, CN,  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML,  
MR, NE, SN, TD, TG  
PRAI US 2000-706574 A2 20001103  
WO 2001-US46957 W 20011105  
US 2002-51663 A2 20020118  
US 2002-143534 A 20020510

=> d his

(FILE 'HOME' ENTERED AT 13:01:57 ON 06 MAY 2004)

FILE 'BIOSIS, CAPLUS' ENTERED AT 13:02:04 ON 06 MAY 2004  
L1 15418 S AMYLOID (3A) BETA (3A) (PROTEIN OR PEPTIDE)  
L2 884 S L1 (10A) AGGREGAT?  
L3 22 S L2 (10A) PREVENT?  
L4 1009 S L1 (10A) INHIBIT?  
L5 83 S L2 (10A) INHIBIT?  
L6 102 S L3 OR L5  
L7 80 DUP REM L6 (22 DUPLICATES REMOVED)  
L8 0 S L2 (10A) SUPPRESS?

=> s l7 not antibody?  
L9 73 L7 NOT ANTIBOD?

=> s l2 (5a) (prevent? or inhibit?)  
L10 98 L2 (5A) (PREVENT? OR INHIBIT?)

=> dup rem l10  
PROCESSING COMPLETED FOR L10  
L11 78 DUP REM L10 (20 DUPLICATES REMOVED)

=> s l11 not antibody?  
L12 71 L11 NOT ANTIBOD?

> d his

(FILE 'HOME' ENTERED AT 13:01:57 ON 06 MAY 2004)

FILE 'BIOSIS, CAPLUS' ENTERED AT 13:02:04 ON 06 MAY 2004  
L1 15418 S AMYLOID (3A) BETA (3A) (PROTEIN OR PEPTIDE)

cytotoxic peptides prevented A.beta. aggregation; rather, they increased aggregate size and altered aggregate morphol. These results suggest that coupling recognition with disrupting elements is an effective generalizable strategy for the creation of A.beta. inhibitors. Significantly, prevention of A.beta. aggregation may not be required for prevention of toxicity.

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:163613 CAPLUS

DN 128:217639

TI Preparation of D-amino acid peptides as modulators of .beta.-amyloid peptide aggregation

IN Findeis, Mark A.; Gefter, Malcolm L.; Musso, Gary; Signer, Ethan R.; Wakefield, James; Molineaux, Susan; Chin, Joseph; Lee, Jung-Ta; Kelley, Michael; Komar-Panicucci, Sonja; Arico-Muendel, Christopher C.; Phillips, Kathryn; Hayward, Neil J.

PA Praecis Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 92 pp.

DT Patent

LA English

PAN.CNT 7

PATENT NO. APPLICATION NO. DATE

PI WO 9808868 19980305 WO 1997-US:5166 19970827 <--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GR, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, MY, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, BF, BJ, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 6303567 B1 20011016

AU 9742387 A1 19980319

AU 741199 B2 20011122

EP 929574 A1 19990721

R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2001500852 T2 20010123

AU 759036 B2 20040212

AU 765915 B2 20040212

PRAI US 1996-703675 A 19960827

US 1997-897342 A 19970721

US 1995-404831 A2 19950314

US 1995-475579 A2 19950607

US 1995-548998 B2 19951027

AU 1996-52524 A3 19960314

US 1996-616081 B2 19960314

AU 1997-42387 A3 19970827

WO 1997-US15166 W 19970827

MARPAT 128:217639

OS Comps. that modulate natural .beta.-amyloid peptide aggregation are provided. The modulators of the invention comprise a peptide, preferably based on a .beta.-amyloid peptide, that is comprised entirely of D-amino

L2 884 S L1 (10A) AGGREGAT?

L3 22 S L2 (10A) PREVENT?

L4 1009 S L1 (10A) INHIBIT?

L5 83 S L2 (10A) INHIBIT?

L6 102 S L3 OR L5

L7 80 DUP REM L6 (22 DUPLICATES REMOVED)

L8 0 S L2 (10A) SUPPRESS?

L9 73 S L7 NOT ANTIBOD?

L10 98 S L2 (5A) (PREVENT? OR INHIBIT?)

L11 78 DUP REM L10 (20 DUPLICATES REMOVED)

L12 71 S L11 NOT ANTIBOD?

=> s l12 and pd<=1999

1 FILES SEARCHED...

L13 24 L12 AND PD<=1999

=> dup rem l13

PROCESSING COMPLETED FOR L13

L14 24 DUP REM L13 (0 DUPLICATES REMOVED)

=> d l14 bib ab 1-24

L14 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:148185 CAPLUS

DN 130:347290

TI Recognition sequence design for peptidyl modulators of .beta.-amyloid aggregation and toxicity

AU Pallitto, Monica M.; Ghanta, Jyothi; Heinzelman, Peter; Kiessling, Laura L.; Murphy, Regina M.

CS Departments of Chemical Engineering and Chemistry, University of Wisconsin, Madison, WI, 53706, USA

SO Biochemistry ( \*\*\*1999\*\*\* ), 38(12), 3570-3578

CODEN: BICHEM, ISSN: 0006-2960

PB American Chemical Society

DT Journal

LA English

AB .beta.-Amyloid (A.beta.), the primary protein component of Alzheimer's plaques, is neurotoxic when aggregated into fibrils. We have devised a modular strategy for generating compds. that inhibit A.beta. toxicity, based on linking a recognition element for A.beta. to a disrupting element designed to interfere with A.beta. aggregation. One such compd., with the 15-25 sequence of A.beta. as the recognition element and a lysine hexamer as the disrupting element, altered A.beta. aggregation kinetics and protected cells from A.beta. toxicity [Ghanta et al. (1996) J. Biol. Chem. 271, 29525]. To optimize the recognition element, peptides of 4-8 residues composed of overlapping sequences within the 15-25 domain were synthesized, along with hybrid compds. contg. those recognition sequences coupled to a lysine hexamer. None of the recognition peptides altered A.beta. aggregation kinetics and only two, KLVFF and KLVFF, had any protective effect against A.beta. toxicity. The hybrid peptide KLVFF-KKKKKK dramatically altered A.beta. aggregation kinetics and aggregate morphol. and provided significantly improved protection against A.beta. toxicity compared to the recognition peptide alone. In contrast, FAEVVG-KKKKKK possessed only modest inhibitory activity and had no marked effect on A.beta. aggregation. The scrambled sequence VLFKF was nearly as effective a recognition domain as KLVFF, suggesting the hydrophobic characteristics of the recognition sequence are crit. None of the

acids. Preferably, the peptide comprises 3-5 D-amino acid residues and includes at least two D-amino acid residues independently selected from the group consisting of D-Leu, D-Phe, and D-Val. In a particularly preferred embodiment, the peptide is a retro-inverso isomer of a .beta.-amyloid peptide, preferably a retro-inverso isomer of A.beta.17-21. In certain embodiments, the peptide is modified at the amino-terminus, the carboxy-terminus, or both. Preferred amino-terminal modifying groups include cyclic, heterocyclic, polycyclic and branched alkyl groups. Preferred carboxy-terminal modifying groups include an amide group, an alkylamide group, an arylamide group or a hydroxy group. Pharmaceutical compns. comprising the compds. of the invention, and diagnostic and treatment methods for amyloidogenic diseases using the compds. of the invention, are also disclosed. Thus, peptide H-D-Leu-D-Val-D-Phe-D-Phe-D-Ala-NH<sub>2</sub>, prepd. by std. solid-phase methods. \*\*\*inhibited\*\*\*  
 \*\*\*aggregation\*\*\* of natural. \*\*\*beta\*\*\*. - - - - - amyloid\*\*\*  
 \*\*\*peptide\*\*\* with a change in lag time of 3.5 at a concn. of 3 .mu.M.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1999:25980 CAPLUS  
 DN 130:90531  
 TI Modulators of .beta.-amyloid peptide aggregation with modified  
 .beta.-amyloid peptides  
 IN Findeis, Mark A.; Benjamin, Howard; Garnick, Marc B.; Geffer, Malcolm L.;  
 Hundal, Arvind; Kasman, Laura; Musso, Gary; Signer, Ethan R.; Wakefield,  
 James; Reed, Michael J.  
 PA Praecis Pharmaceuticals Incorporated, USA  
 SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 404,831.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5854215	A	19981229	US 1995-475579	19950607 <--
US 5817626	A	19981006	US 1995-404831	19950314 <--
CA 2214247	AA	19960919	CA 1996-2214247	19960314 <--
WO 9628471	A1	19960919	WO 1996-US3492	19960314 <--
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9652524	A1	19961002	AU 1996-52524	19960314 <--
EP 815134	A1	19980107	EP 1996-908805	19960314 <--
EP 815134	B1	20020605		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, SE, MC, PT, IE, FI				
US 5854204	A	19981229	US 1996-612785	19960314 <--
JP 11514333	T2	19991207	JP 1996-527816	19960314 <--
US 6319498	B1	20011120	US 1996-617267	19960314 <--
AT 218583	E	20020615	AT 1996-908805	19960314 <--
ES 2175083	T3	20021116	ES 1996-908805	19960314 <--
US 6303567	B1	20011016	US 1996-703675	19960827
AU 759036	B2	20030403	AU 2000-35389	20000519
US 2002098173	A1	20020725	US 2001-972475	20011004
US 769915	B2	20040212	AU 2002-15539	20020211
US 2004005307	A1	20040108	US 2003-463729	20030617
PRAI US 1995-404631	A2	19950314		

US 1995-475579 A 19950607  
 US 1995-548998 A 19951027  
 AU 1996-52524 A3 19960314  
 US 1996-616081 B2 19960314  
 US 1996-617267 A1 19960314  
 WO 1996-US3492 W 19960314  
 AU 1997-42387 A3 19970827  
 US 2001-972475 A1 20011004  
 AB Compds. that act to modulate the aggregation of natural .beta. amyloid peptides (beta-AP) are disclosed. The .beta. amyloid modulators of the invention can promote .beta.-AP aggregation or, more preferably, can inhibit natural .beta.-AP aggregation. Furthermore, the modulators are capable of altering natural .beta.-AP aggregation when the natural .beta.-APs are in a molar excess amt. relative to the modulators. Pharmaceutical compns. comprising the compds. of the invention, and methods of altering natural .beta.-AP aggregation using the compds. of the invention, are also disclosed. Compds. of the invention include (Xaa)An (Xaa = .beta.-amyloid peptide; A = cyclic or heterocyclic modulating group). Amino-terminally biotinylated .beta.-API-40 \*\*\*inhibited\*\*\*  
 \*\*\*aggregation\*\*\* of natural. \*\*\*beta\*\*\*. - - - - - amyloid\*\*\*  
 \*\*\*peptide\*\*\*

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:588458 CAPLUS  
 DN 129:300702  
 TI Fibrillogenesis of .beta.-amyloid  
 AU Allsop, D.; Howlett, D.; Christie, G.; Karran, E.  
 CS Neurosciences Research, SmithKline Beecham Pharmaceuticals, Essex, CM19 5AW, UK  
 SO Biochemical Society Transactions ( \*\*\*1998\*\*\* ), 26(3), 459-463  
 CODEN: BCSTB5; ISSN: 0300-5127  
 PB Portland Press Ltd  
 DT Journal: General Review  
 LA English  
 AB A review with 51 refs. that summarized briefly the progress that has been made towards identification of \*\*\*inhibitors\*\*\* of either .beta.-amyloid or .beta.-aggregation. The formation and deposition in the brain of A.beta. are thought by many to be early and key pathol. events in the development of Alzheimer's disease. A straight forward means to prevent formation of A.beta. would be to inhibit the proteolytic enzymes (.beta.-secretase and .gamma.-secretase). Despite the fact that for the last 10 yr these two particular enzyme activities have been assocd. with the prodn. of A.beta., their identity still remains unknown. Given the lack of progress in the identification of proteinases involved in A.beta. prodn., an alternative strategy has been to test compds. for the ability to inhibit A.beta. formation by whole cells in culture. In this review we summarize compds. identified in this manner. In addn. to these compds. potent inhibitors of the chymotrypsin-like activity of the proteasome (CLiP). In this review we also summarize a few of the compds. that inhibit aggregation of A.beta.. Despite the large amt. of effort in this area of research, it is clear that a no. of questions need to be answered before further genuine progress can be made.

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. ON STN  
 AN 1998:381159 BIOSIS  
 DN PREV199800381159  
 TI The use of a scintillation proximity assay to determine the interactions between beta-amyloid and \*\*\*inhibitors\*\*\*  
 and \*\*\*beta\*\*\* - \*\*\*amyloid\*\*\* \*\*\*aggregation\*\*\*  
 AU Swatton, J. E. [Reprint author]; Howlett, D. R.; Spitfaden, C.  
 CS SmithKline Beecham Pharmaceutical, New Frontiers Science Park, Harlow, Essex CM19 5AW, UK  
 SO British Journal of Pharmacology, ( \*\*\*March, 1998\*\*\* ) Vol. 123, No. PROC. SUPPL., pp. 181P. print.  
 Meeting Info.: Meeting of the British Pharmacological Society held jointly with Dutch Pharmacological Society, The Belgian Society for Fundamental and Clinical Physiology and Pharmacology, Harrogate, England, UK. December 10-12, 1997. Belgian Society for Fundamental and Clinical Physiology and Pharmacology; British Pharmacological Society; Dutch Pharmacological Society.  
 CODEN: BJPCBM. ISSN: 0007-1188.  
 DT Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 Conference; (Meeting Poster)  
 LA English  
 ED Entered STN: 2 Sep 1998  
 Last Updated on STN: 2 Sep 1998

L14 ANSWER 6 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. ON STN  
 AN 1998:381159 BIOSIS  
 DN PREV199800381159  
 TI Identification of a novel class of \*\*\*inhibitor\*\*\* of \*\*\*beta\*\*\* - \*\*\*amyloid\*\*\* \*\*\*peptide\*\*\* \*\*\*aggregation\*\*\*  
 AU Howlett, D. R. [Reprint author]; Markwell, R. E. [Reprint author]; Wood, S. J.  
 CS SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Harlow, Essex CM19 5AW, UK  
 SO British Journal of Pharmacology, ( \*\*\*March, 1998\*\*\* ) Vol. 123, No. PROC. SUPPL., pp. 25P. print.  
 Meeting Info.: Meeting of the British Pharmacological Society held jointly with Dutch Pharmacological Society, The Belgian Society for Fundamental and Clinical Physiology and Pharmacology, Harrogate, England, UK. December 10-12, 1997. Belgian Society for Fundamental and Clinical Physiology and Pharmacology; British Pharmacological Society; Dutch Pharmacological Society.  
 CODEN: BJPCBM. ISSN: 0007-1188.  
 DT Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LA English  
 ED Entered STN: 2 Sep 1998  
 Last Updated on STN: 2 Sep 1998

L14 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2004 ACS ON STN  
 AN 1997:723754 CAPLUS  
 DN 128:73615  
 TI Hematin and related porphyrins inhibit beta-amyloid aggregation  
 AU Howlett, David; Cutler, Paul; Heales, Simon; Camilleri, Patrick  
 CS Third Avenue, New Frontiers Science Park, SmithKline Beecham

Pharmaceuticals, Harlow, Essex CM19 5AW, UK  
 FEBS Letters ( \*\*\*1997\*\*\* ), 417(2), 249-251  
 CODEN: FEELAL; ISSN: 0014-5793  
 DT Elsevier  
 DT Journal  
 LA English  
 AB Porphyrins related to the naturally occurring pigment heme were found to effectively interfere with the aggregation of beta-amyloid peptides as detd. by an immunoassay configured for the detection of beta-amyloid oligomers. Oligomerization of beta-amyloid is believed to be a key event in the progression of Alzheimer's disease. Inhibition of this aggregation is thus an important strategy in combating this commonest form of senile dementia. Evidence was also generated for hemin and hematin mediated protection of cultured cells against the neurotoxic effects of beta-amyloid. These data are discussed with ref. to the known pathol. of Alzheimer's disease and the chem. of porphyrins.  
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2004 ACS ON STN  
 AN 1996:748345 CAPLUS  
 DN 126:19332  
 TI Preparation of peptides as modulators of amyloid aggregation  
 IN Findeis, Mark A.; Benjamin, Howard; Garnick, Marc B.; Geffer, Malcolm L.; Hundal, Arvind; Kasman, Laura; Musso, Gary; Signer, Ethan R.; Wakefield, James; et al.  
 PA Pharmaceutical Peptides Incorporated, USA  
 SO PCT Int. Appl., 105 pp.  
 CODEN: PLYX2D  
 DT Patent  
 LA English  
 FAM.CNT 7  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 WO 9628471 A1 19960919 WO 1996-US3492 19960314 <--  
 W: AU, CA, JP  
 RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 US 5817626 A 19981006 US 1995-404831 19950314 <--  
 US 5854215 A 19981229 US 1995-475579 19950607 <--  
 AU 9652524 A1 19961002 AU 1996-52524 19960314 <--  
 EP 815134 A1 19980107 EP 1996-908605 19960314 <--  
 EP 815134 B1 20020605  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  
 JP 11514333 T2 19991207 JP 1996-527816 19960314 <--  
 AT 218583 E 20020615 AT 1996-908805 19960314 <--  
 AU 759036 B2 20030403 AU 2000-35389 20000519  
 AU 76915 B2 20040212 AU 2002-15539 20020211  
 PRAI US 1995-404831 A 19950314  
 US 1995-475579 A 19950607  
 US 1995-548998 A 19951027  
 AU 1996-52524 A3 19960314  
 WO 1996-US3492 W 19960314  
 AU 1997-42387 A3 19970827  
 AB Comps. that modulate the aggregation of amyloidogenic proteins or peptides are disclosed. The modulators of the invention can promote amyloid aggregation or, more preferably, can inhibit natural amyloid



Journal of Biological Chemistry, ( \*\*\*1996\*\*\* ) Vol. 271, No. 12, pp. 6839-6844.  
 CODEN: JBCHA3. ISSN: 0021-9258.

DT Article  
 LA English  
 ED Entered STN: 2 May 1996

AB Last Updated on STN: 10 Jun 1996  
 Aggregation of physiologically produced soluble amyloid beta protein (A-beta) to insoluble, neurotoxic fibrils is a crucial step in the pathogenesis of Alzheimer's disease. Aggregation studies with synthetic A-beta 1-40 peptide by the thioflavin T fluorescence assay and electron microscopy and cytotoxicity assays using rat pheochromocytoma PC12 cells showed that an antibiotic, rifampicin, and its derivatives, which possess a naphthohydroquinone or naphthoquinone structure, inhibited A-beta 1-40 aggregation and neurotoxicity in a concentration-dependent manner. Hydroquinone, p-benzoquinone, and 1,4-dihydroxynaphthalene, which represent partial structures of the aromatic chromophore of rifampicin derivatives, also inhibited A-beta 1-40 aggregation and neurotoxicity at comparable molar concentrations to rifampicin. Electron spin resonance spectrometric analysis revealed that the inhibitory activities of those agents correlated with their radical-scavenging ability on hydroxyl free radical, which was shown to be generated in cell-free incubation of A-beta 1-40 peptide. These results suggest that at least one mechanism of rifampicin-mediated inhibition of A-beta aggregation and neurotoxicity involves scavenging of free radicals and that rifampicin and/or appropriate hydroxyl radical scavengers may have therapeutic potential for Alzheimer's disease.

L14 ANSWER 12 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 AN 1996:527469 BIOSIS  
 DN PREV19969249825  
 TI Relationship between multifunctional protein "clusterin" and Alzheimer disease.  
 AU Choi-Miura, Nam-ko; Oda, Tomichiro [Reprint author]  
 CS Neurosci. Res. Lab., Sankyo Co. Ltd., 1-2-58 Hiromachi, Shinagawa-ku, Tokyo 140, Japan  
 SO Neurobiology of Aging, ( \*\*\*1996\*\*\* ) Vol. 17, No. 5, pp. 717-722.  
 CODEN: NEAGDO. ISSN: 0197-4580.

DT Article  
 LA English  
 ED Entered STN: 22 Nov 1996

AB Last Updated on STN: 22 Nov 1996  
 In the Alzheimer disease (AD) brain, senile plaques contain several proteins and cytokines, such as beta-amyloid protein (A-beta), interleukin 1, transforming growth factor beta-1 (TGF beta-1), and apolipoprotein E, which may contribute to the process of neurodegeneration. Clusterin is also known to colocalize with A-beta deposits in neuritic plaques. Clusterin is a multifunctional protein that causes cell aggregation, binds to beta-endorphin, and inhibits the terminal complex formation of complement. Clusterin mRNA and protein are increased in the brains of AD patients. Cytokines such as TGF beta-1 and interleukin 1 enhance the expression of clusterin, which may link clusterin to inflammatory mechanisms in AD. beta-1, a 39-43 amino acid peptide, is a major component of the senile plaques that are characteristic of AD. Highly aggregated A-beta is implicated in neurodegeneration, e.g., A-beta aggregates spontaneously into fibrillar forms resembling those in plaques that, in experimental models, cause neurotoxicity through oxidative stress. Clusterin inhibits

the aggregation of A-beta, which might be neuroprotective according to the aggregation-toxicity hypothesis of A-beta. However, clusterin enhanced the oxidative stress of A-beta. This may extend its neurotoxicity to locations distal from plaques wherever A-beta is present.

L14 ANSWER 13 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 AN 1996:321308 BIOSIS  
 DN PREV199699043664  
 TI Expression of apolipoprotein E \*\*\*inhibits\*\*\* amyloid aggregation\*\*\* of the C-terminal fragments of \*\*\*beta\*\*\* - \*\*\*amyloid\*\*\* precursor \*\*\*protein\*\*\*.  
 AU Ohman, Tauni; Dang, Nocthao; Lebeouf, Renee C.; Furlong, Clement E.; Fukuchi, Ken-Ichiro [Reprint author]  
 CS Dep. Comp. Med., Univ. Ala. Birm., 402 Volker Hall, 1670 University Blvd., Birmingham, AL 35294-0019, USA  
 SO Neuroscience Letters, ( \*\*\*1996\*\*\* ) Vol. 210, No. 1, pp. 65-68.  
 CODEN: NELEDS. ISSN: 0304-3940.

DT Article  
 LA English  
 ED Entered STN: 11 Jul 1996

AB Last Updated on STN: 11 Jul 1996  
 An important role of apolipoprotein E in the amyloidogenesis of Alzheimer's disease is suggested by an accumulation of apolipoprotein E in beta-amyloid plaques and a genetic association between Alzheimer's disease and one of the allelic variants (APOE4) of apolipoprotein E. Overexpression of a C-terminal region of beta-amyloid precursor protein brings about aggregation of the C-terminal fragments in COS cells. This COS cell culture system was used to study effects of apolipoprotein E on aggregation of the C-terminal fragments. When both apolipoprotein E and the C-terminal fragments were overexpressed in COS cells, Western blot analyses revealed significant inhibition of aggregation of the C-terminal fragments. No significant differences between apolipoprotein E3 and E4 in the inhibitory activities were found by this method. Apolipoprotein E may inhibit formation of amyloid fibrils.

L14 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1996:613777 CAPLUS  
 DN 125:298604  
 TI Relative efficacies of amyloid .beta. peptide (A.beta.) binding proteins in A.beta. aggregation  
 AU Webster, Scott; Rogers, Joseph  
 CS L. J. Roberts Center Alzheimer's Research, Sun Health Research Institute, Sun City, AZ, USA  
 SO Journal of Neuroscience Research ( \*\*\*1996\*\*\* ), 46(1), 58-66  
 CODEN: JNRDXX; ISSN: 0360-4012

DT Journal  
 LA English

AB The aggregation of amyloid .beta. peptide (A.beta.) into its fibrillar, cross .beta.-pleated configuration is generally viewed as a crit. event in the pathophysiol. of Alzheimer's disease (AD). A diverse group of mols., the A.beta. binding proteins, has been evaluated for their effects of this process. However, most of these studies have used micromolar or greater reagent concns., and their different methods have not permitted quant. comparisons of the efficacy of different A.beta. binding proteins in augmenting or inhibiting aggregation. In the present work we have undertaken a coherent anal. using fluorimetry of thioflavin T-stained



exptl. solns. The complement protein C1q, serum amyloid P, and transhyretin significantly enhanced the formation of precipitable, cross beta-pleated aggregates in solns. of 800 nM A-beta(1-42). Under these same exptl. conditions, alpha-1-antichymotrypsin had no significant effect on the aggregation process, and both the E3 and E4 isoforms of apolipoprotein E were significant inhibitors. There was a non-significant trend toward the E3 isoform exhibiting greater inhibition than the E4 isoform. Of the aggregation-facilitating mols., C1q was substantially and significantly the most potent.

ANSWER 15 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 AN 1996:336322 BIOSIS  
 DN PREV199699058678  
 TI Alpha-1-Antichymotrypsin interaction with A-beta (1-40) inhibits fibril formation but does not affect the peptide toxicity.  
 AU Aksenova, Marina V. [Reprint author]; Aksenov, Michael Y.; Butterfield, D. Allan; Carney, John M.  
 CS Dep. Pharmacol., Univ. Kentucky, 800 Rose St. MS 305, Lexington, KY 40536, USA  
 SO Neuroscience Letters, ( \*\*\*1996\*\*\* ) Vol. 211, No. 1, pp. 45-48.  
 DN CODEN: NELED5. ISSN: 0304-3940.  
 DT Article  
 LA English  
 ED Entered STN: 26 Jul 1996  
 AB Recent studies have shown that senile plaque-associated or glial-derived proteins can prevent fibril formation of beta-amyloid peptide (A-beta), while increasing the neurotoxicity of the latter (in the case of glutamine synthetase, apolipoprotein J or thrombin). alpha-1-Antichymotrypsin (ACT) is a glial-derived protein associated with senile plaques in the Alzheimer's brain. In this report we show that ACT, a minor \*\*\*protein\*\*\* component of \*\*\*beta\*\*\* - \*\*\*amyloid\*\*\* deposits,

is able to \*\*\*inhibit\*\*\* A-beta (1-40) \*\*\*aggregation\*\*\* into fibrils, but unable to modulate the toxicity of A-beta (1-40) in primary rat hippocampal cell cultures. These results are discussed in terms of the potential role of glial-derived proteins on A-beta aggregation and neurotoxicity.

ANSWER 16 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 AN 1996:416459 BIOSIS  
 DN PREV199699138815  
 TI Beta-Amyloid protein and Alzheimer's disease.  
 AU Bao Ximin  
 CS Dep. Neurobiol., Zhu Jiang Hosp., First Military Med. Univ., Guangzhou 510282, China  
 SO Chinese Medical Journal (English Edition), ( \*\*\*1996\*\*\* ) Vol. 109, No. 1, pp. 41-43.  
 DN CODEN: CMJODS. ISSN: 0366-6999.  
 DT Article  
 LA English  
 ED Entered STN: 10 Sep 1996  
 AB Last Updated on STN: 11 Oct 1996

ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1996:97266 CAPLUS  
 DN 124:135727

TI Method and use of agents to inhibit protein polymerization, methods of identifying these agents, and use of the agents as antithrombotics and for the treatment of Alzheimer's disease

IN Bjornsson, Thorir D.  
 PA Thomas Jefferson University, USA  
 SO PCT Int. Appl., 18 pp.  
 DN CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
 WO 9531192 A1 19951123 WO 1995-US6383 19950515 <--  
 W: CA, JP, US

PI RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 PRAI US 1994-243114 19940516  
 OS MARPAT 124:135727

AB A method of inhibiting polymn. of target proteins by administration of compds. capable of inhibiting aggregation and subsequent transglutaminase-induced crosslinking of adjacent peptides of the target proteins is provided. These compds. are useful as antithrombotic agents and in the treatment of Alzheimer's disease. A method of screening and identifying compds. capable of \*\*\*inhibiting\*\*\* aggregation and subsequent transglutaminase-induced crosslinking of \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\* - \*\*\*peptide\*\*\* is also provided.

L14 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:733344 CAPLUS  
 DN 123:107277

TI Method of \*\*\*preventing\*\*\* aggregation\*\*\* of \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\* - \*\*\*protein\*\*\*  
 IN Goldgaber, Dmitry Y.; Schwarzman, Alexander L.; Eisenberg-Grumberg, Moises

PA Research Foundation of State University of New York, USA  
 SO PCT Int. Appl., 53 pp.  
 DN CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
 WO 9512815 A1 19950511 WO 1994-US12584 19941103 <--  
 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,

GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN, RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 5744368 A 19980428 US 1993-148117 19931104 <--  
 AU 9481310 A1 19950523 AU 1994-81310 19941103 <--  
 PRAI US 1993-148117 19931104  
 WO 1994-US12584 19941103

AB This invention is directed to methods and compns. for \*\*\*preventing\*\*\* aggregation\*\*\* of \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\* - \*\*\*protein\*\*\* .beta.-protein is assoc. with the deposition of amyloid in the brain. Amyloid .beta.-protein-binding compds. such as transhyretin are described

which form complexes with .beta.AP and prevent formation of amyloid. This invention also identifies the serine 6 mutation in the TTR gene as predictive of person at risk for developing .beta.AP assoc. amyloidosis.

L14 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:111696 CAPLUS  
DN 124:279195  
TI \*\*\*Amyloid\*\*\* . \*\*\*beta\*\*\* . \*\*\*protein\*\*\*  
IN Kataoka, Kenichiro; Tomyama, Takami; Morita, Takuya; Endo, Noriaki  
PA Teijin Ltd, Japan  
SO Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
PI JP 07309760 A2 19951128 JP 1994-102554 19940517 <--  
PRAI JP 1994-102554 19940517  
OS MARPAT 124:279195  
AB \*\*\*Amyloid\*\*\* . \*\*\*beta\*\*\* . \*\*\*protein\*\*\*  
and/or deposition \*\*\*inhibitors\*\*\* contg. rifamycin derivs. I [XX, YY, ZZ = CH2CH2, CH;CH; R1-2 = H, C2-7 acyl; R3-7 = H, C1-6 alkyl which may be substituted with halo, NH2, NO2, cyano, CO2H, OH, C1-6 monalkylamino, C2-7 C2-12 dialkylamino, C1-6 alkyl, C1-6 alkoxy, C2-7 acyl, C2-7 acyloxy, C2-7 alkyloxy, C2-7 acylamino; X in the N-contg. ring = N, CH; n = 1-3], II (R8 = H, C2-7 acyl), or III (R9 = H, C2-7 acyl) or their pharmaceutically acceptable salts as active ingredients are claimed. 8-O-pivaloyl-3-[4-(2,4,6-trimethylbenzyl)piperazin-1-yl]rifamycin SV. prepd. from rifamycin S and 1-benzylpiperazine with 4 steps, significantly \*\*\*inhibited\*\*\* in vitro \*\*\*aggregation\*\*\* of .beta.1-35  
\*\*\*peptide\*\*\* of \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\* . \*\*\*protein\*\*\* .

L14 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:1130857 CAPLUS  
DN 124:165268  
TI \*\*\*Inhibitors\*\*\* for \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\*  
IN Kataoka, Kenichiro; Tomyama, Takami; Morita, Takuya; Endo, Noriaki  
PA Teijin Ltd, Japan  
SO Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
PI JP 07309759 A2 19951128 JP 1994-102553 19940517 <--  
PRAI JP 1994-102553 19940517  
OS MARPAT 124:165268  
AB The title inhibitors (I: -X-X-, -Y-Y-, and -Z-Z- are ethylene or vinylene group; R1 = H or C2-7 acyl group; R2 and R3 bound together or = H; R4 = H or acetyl group; R5 = H or C1-C6 alkyl group; R6, R7 = H or C1-C6 alkyl group; R8 branched-chain or cyclic fatty hydrocarbon group, or heteroallyl group contg. 1-3 no. of hetero atoms O, S, and N in the ring; n = 1-3) were prepd. from rifamycin derivs. I and their pharmaceutical salts can

\*\*\*inhibit\*\*\* . \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\* . \*\*\*protein\*\*\*  
\*\*\*aggregation\*\*\* and deposit and thus, useful for treatment of Alzheimer's disease.

L14 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:83075 CAPLUS  
DN 124:135720  
TI \*\*\*Amyloid\*\*\* . \*\*\*beta\*\*\* . \*\*\*protein\*\*\*  
IN Kataoka, Kenichiro; Tomyama, Takami; Morita, Takuya; Endo, Noriaki  
PA Teijin Ltd, Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
PI JP 07304675 A2 19951121 JP 1994-96383 19940510 <--  
PRAI JP 1994-96383 19940510  
OS MARPAT 124:1135720  
AB The inhibitors contain rifamycin derivs. I (R1-2 = H, C2-7 acyl; R3-7 = H, C1-6 alkyl; n = 1-2) or their pharmaceutically acceptable salts as active ingredients. The inhibitors suppress neurotoxicity of amyloid .beta. proteins and are useful for prevention and treatment of Alzheimer's disease. 3-(4-Benzylhomopiperazin-1-yl)rifamycin SV (prepd. from rifamycin S and 4-benzylhomopiperazine) \*\*\*inhibited\*\*\* in vitro \*\*\*aggregation\*\*\* of \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\* . \*\*\*protein\*\*\* partial . \*\*\*peptide\*\*\* .beta.1-35.

L14 ANSWER 22 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
AN 1995:425746 BIOSIS  
DN PREV199598440046  
TI Mechanism of \*\*\*prevention\*\*\* of \*\*\*amyloid\*\*\* . \*\*\*beta\*\*\*  
\*\*\*protein\*\*\* \*\*\*aggregation\*\*\* by transthyretin and apolipoprotein E.  
AU Schwarzman, A. L. [Reprint author]; Vitek, M. P.; Tsiper, M. [Reprint author]; Wente, H. [Reprint author]; Wang, A. [Reprint author]; Francis, A. [Reprint author]; Goldhaber, D. [Reprint author]  
CS Dep. Psychiatry Behavioral Sci. Sch. Med., State Univ. New York, Stony Brook, NY 11794, USA  
SO Society for Neuroscience Abstracts, ( \*\*\*1995\*\*\* ) Vol. 21, No. 1-3, pp. 6.

Meeting Info.: 25th Annual Meeting of the Society for Neuroscience. San Diego, California, USA. November 11-16, 1995.  
ISSN: 0190-5295.  
Conference: (Meeting)  
Conference: Abstract; (Meeting Abstract)  
Conference: (Meeting Slide)  
English  
Entered STN: 3 Oct 1995  
Last Updated on STN: 1 Nov 1995

L14 ANSWER 23 OF 24 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
AN 1994:537213 BIOSIS  
DN PREV199497550213  
TI Rifampicin \*\*\*prevents\*\*\* the \*\*\*aggregation\*\*\* and neurotoxicity

of \*\*\*amyloid\*\*\* \*\*beta\*\*\* \*\*protein\*\*\* in vitro.  
Tomiyama, Takami [reprint author]; Asano, Satoshi [reprint author]; Suwa,  
Yorinasa [reprint author]; Morita, Takuya [reprint author]; Kataoka,  
Ken-ichiro [reprint author]; Mori, Hiroshi; Endo, Noriaki [reprint author]  
Teijin Inst. Biomed. Res., 4-3-2 Asahigaoka, Hino, Tokyo 191, Japan  
Biochemical and Biophysical Research Communications, ( \*\*\*1994\*\*\* ) Vol.  
204, No. 1, pp. 76-83.  
CODEN: BBRCA9. ISSN: 0006-291X.

DT Article  
LA English  
ED

Entered STN: 15 Dec 1994

Last Updated on STN: 12 Jan 1995

AB The aggregation and cerebral deposition of amyloid beta protein (A-beta), which is a major component of senile plaques in Alzheimer's disease (AD) brains, is believed to be involved in the pathogenesis of AD. Inhibition of A-beta aggregation would seem to be a promising strategy for the treatment of AD. Here, we show that rifampicin, which is an antibiotic widely used in the treatment of tuberculosis and leprosy, inhibited the aggregation and fibril formation of synthetic A-beta-1-40 peptide in a dose-dependent manner at reasonable concentrations. Furthermore, rifampicin was found to prevent A-beta-140-induced neurotoxicity on rat pheochromocytoma PC12 cells. Rifampicin may have therapeutic potential as an agent for inhibiting the initial step of amyloid formation in AD.

L14 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2004 ACS ON STN

AN 1993:229358 CAPLUS

DN 118:229358

TI Labeled .beta.-amyloid peptide and Alzheimer's disease detection

IN Maggio, John Edward; Mantyh, Patrick William

PA University of Minnesota, USA; Harvard College

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PI WO 9304194 A1 19930304 WO 1992-US6700 19920810 <--

W: CA, JP

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE

US 5434050 A 19950718 US 1991-744767 19910813 <--

EP 599979 A1 19940608 EP 1992-918394 19920810 <--

R: CH, DE, FR, GB, IT, LI

JP 06510761 T2 19941201 JP 1992-504386 19920810 <--

US 5837473 A 19981117 US 1995-433734 19950503 <--

PRAI US 1991-744767 19910813

WO 1992-US6700 19920810

AB A labeled .beta.-amyloid peptide (or active fragment) is disclosed, as are a pharmaceutical compn. contg. the peptide or fragment, a labeling method, and methods using the peptide or fragment for diagnosing or monitoring Alzheimer's disease in a patient. Thus, .beta.-amyloid peptide(1-40) (sequence included) was radiolabeled with 125I for use as a diagnostic agent. In tissue autoradiog. studies, there was essentially no displaceable binding of the radioligand to normal tissue homogenates or sections, but there was significant displaceable binding to Alzheimer's disease-derived tissue. The binding to Alzheimer's disease-derived tissue was not saturable, suggesting that most of the sites to which the

radioligand bound were not receptors in the usual sense; rather, the binding characteristics were consistent with the growth of Alzheimer's disease amyloid plaques by deposition of .beta.-amyloid peptide from soln. In vitro evaluation of agents for \*\*\*inhibiting\*\*\* or enhancing \*\*\*aggregation\*\*\* of \*\*\*beta\*\*\*-\*\*\*amyloid\*\*\* or for dispersing \*\*\*aggregates\*\*\* of . \*\*\*beta\*\*\*-\*\*\*amyloid\*\*\*. \*\*\*peptide\*\*\* in the absence of Alzheimer's disease plaques, in vitro evaluation of agents for inhibiting or enhancing plaque growth, and localization of radioiodinated 40-mer peptide binding sites in Alzheimer's disease brain tissue are also described.

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(FILE 'HOME' ENTERED AT 13:01:57 ON 06 MAY 2004)

FILE 'BIOSTIS, CAPLUS' ENTERED AT 13:02:04 ON 06 MAY 2004

L1 15418 S AMYLOID (3A) BETA (3A) (PROTEIN OR PEPTIDE)

L2 884 S L1 (10A) AGGREGAT?

L3 22 S L2 (10A) PREVENT?

L4 1009 S L1 (10A) INHIBIT?

L5 83 S L2 (10A) INHIBIT?

L6 102 S L3 OR L5

L7 80 DUP REM L6 (22 DUPLICATES REMOVED)

L8 0 S L2 (10A) SUPPRESS?

L9 73 S L7 NOT ANTIBOD?

L10 98 S L2 (5A) (PREVENT? OR INHIBIT?)

L11 78 DUP REM L10 (20 DUPLICATES REMOVED)

L12 71 S L11 NOT ANTIBOD?

L13 24 S L12 AND PD<=1999

L14 24 DUP REM L13 (0 DUPLICATES REMOVED)

=> log h

COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

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STN INTERNATIONAL SESSION SUSPENDED AT 13:08:53 ON 06 MAY 2004

SINCE FILE ENTRY 94.49 TOTAL SESSION 94.70

SINCE FILE ENTRY -10.40 TOTAL SESSION -10.40